

AU 694951 B Previous Publ.

AU 9672607

Based on

WO 9714313

NZ 319956 A Based on

WO 9714313

JP 10512156 W 19 Based on

WO 9714313

Abstract (Basic): WO 9714313 A

Fresh meat is packaged for retail display by being placed in a tray (12) of gas barrier material with a base, walls and an outward top lip (14), perforating (16) upper parts of the side and end walls to permit gas exchange without clogging by the meat or juices, wrapping with a flexible non-barrier clear plastic web (18) to cover the tray top and sides from lip to base, and perforating (24) the web sides. The wrapped tray is placed in a gas-impermeable outer bag which is placed under vacuum, then flushed with CO<sub>2</sub> which also flushes the wrapped upper and side regions of the tray, and sealed. The tray interior pref. has a residual O<sub>2</sub> content of less than 250 ppm after sealing, and an O<sub>2</sub> scavenger may be placed in the bag. Also claimed is a tray having non-oxygen retaining material. A soaker pad may be placed in the tray before the meat, and a stack of wrapped trays separated by platter paper may be placed in the bag. The tray is e.g. of PVC or polystyrene.

ADVANTAGE - Provides a much longer shelf life of 40-90 days after which the meat still blooms to a bright red colour, and is cheap.

Dwg. 2/7

Abstract (Equivalent): US 5711978 A

Fresh meat is packaged for retail display by being placed in a tray (12) of gas barrier material with a base, walls and an outward top lip (14), perforating (16) upper parts of the side and end walls to permit gas exchange without clogging by the meat or juices, wrapping with a flexible non-barrier clear plastic web (18) to cover the tray top and sides from lip to base, and perforating (24) the web sides. The wrapped tray is placed in a gas-impermeable outer bag which is placed under vacuum, then flushed with CO<sub>2</sub> which also flushes the wrapped upper and side regions of the tray, and sealed. The tray interior pref. has a residual O<sub>2</sub> content of less than 250 ppm after sealing, and an O<sub>2</sub> scavenger may be placed in the bag. Also claimed is a tray having non-oxygen retaining material. A soaker pad may be placed in the tray before the meat, and a stack of wrapped trays separated by platter paper may be placed in the bag. The tray is e.g. of PVC or polystyrene.

ADVANTAGE - Provides a much longer shelf life of 40-90 days after which the meat still blooms to a bright red colour, and is cheap.

Dwg. 1/7

US 5667827 A

A method of packaging fresh meat for retail case-ready display in a oxygen-free atmosphere to provide prolonged shelf life and whereby the meat blooms to a desired red colour when the meat is removed from the packaging, the method comprising the steps of: a) forming a tray of a gas barrier material and having a base, opposed upstanding end walls, and opposed upstanding side walls and an outwardly projecting upper perimeter lip which extends in continuous fashion along upper free ends of the upstanding side and end walls, the side walls, end walls and base of the tray together defining an upwardly open hollow interior sized to receive a piece of meat of a specified cut there within; b) placing a piece of fresh meat within the tray; c) selectively perforating upper portions of the side and end walls of the tray to permit gas exchange through it without clogging due to run-off juices from the meat or shifting of the meat within the tray; d) applying a flexible web of non-barrier clear plastic wrapping material around the tray and meat to provide an overwrapped tray having two enclosed regions, including: i) a first enclosed region defined by a portion of the plastic wrapping material which spans across and covers the hollow interior of the tray; and ii) a second enclosed region defined by a perimeter overwrap portion of the plastic wrapping material which extends from the outwardly projected perimeter lip to the base; e) selectively perforating the perimeter overwrap portion of the plastic wrapping material to permit gas exchange between the first and second enclosed regions and a region outside of the overwrapped tray; f) placing the overwrapped tray within a gas impermeable outer barrier bag; g) applying a vacuum to the outer barrier bag to withdraw normal atmospheric gases from within the outer barrier bag and the first and second enclosed regions of the overwrapped tray; h) flushing the interior of the outer barrier bag and the first and second enclosed

regions of the overwrapped tray with a carbon dioxide gas; and i) sealing the outer barrier bag.

Dwg.2/7

Title Terms: PACKAGE; FRESH; MEAT; RETAIL; DISPLAY; INCREASE; SHELF; LIFE; WRAP; MEAT; GAS; BARRIER; TRAY; PLASTIC; FILM; UPPER; SIDE; PERFORATION; SEAL; BAG; AFTER; EVACUATE; FLUSH; CARBON; DI; OXIDE

Derwent Class: A92; D12; Q34

International Patent Class (Main): A21D-010/02; A23B-004/00; B65D-081/26; B65D-085/00

International Patent Class (Additional): A23B-004/00

File Segment: CPI; EngPI

Manual Codes (CPI/A-N): A12-P01A; A12-P06B; D03-H02F

Polymer Indexing (PS):

<01>

\*001\* 018; R00708 G0102 G0022 D01 D02 D12 D10 D19 D18 D31 D51 D53 D58 D76 D88; R00338 G0544 G0022 D01 D12 D10 D51 D53 D58 D69 D82 C1 7A; H0000; P1741 ; P1796 P1809 ; P1752

\*002\* 018; ND01; Q9999 Q8366-R; Q9999 Q7283; N9999 N6304 N6268; B9999 B5221 B4740; N9999 N6166; K9949; B9999 B3532 B3372; ND07

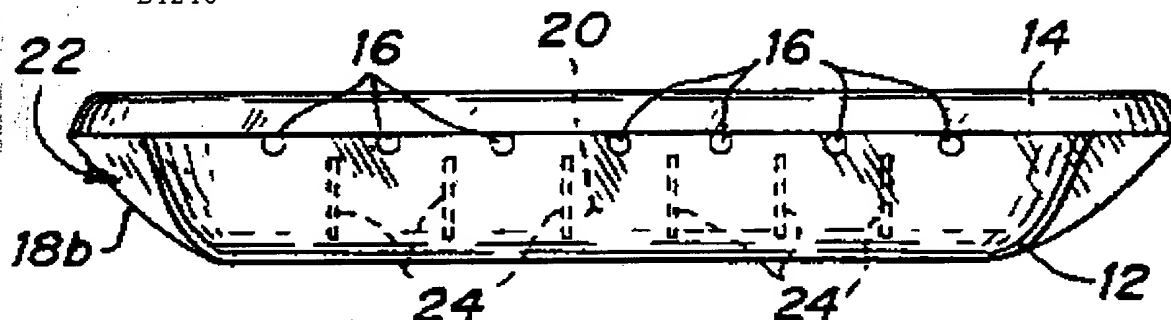
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\*003\* 018; Q9999 Q8560 Q8366; B9999 B4035 B3930 B3838 B3747; B9999 B4397 B4240



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010621192 \*\*Image available\*\*

WPI Acc No: 96-118145/199613

XRAM Acc No: C96-037496

XRPX Acc No: N96-098820

Package for oxygen@ sensitive prods. e.g. fresh red meat, for high transparency - comprises prods. bottom web, non-barrier and peelable barrier layers, and oxygen@ scavenger comprising ethylenically unsatd. hydrocarbon polymer

Patent Assignee: GRACE & CO-CONN W R (GRAC ); CRYOVAC INC (CRYO-N)

Inventor: LOGAN R H; MIRANDA N R; MIZE J A; STOCKLEY H W

Number of Countries: 022 Number of Patents: 008

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
EP 698563	A1	19960228	EP 95305625	A	19950811	B65D-077/20	199613 B
AU 9528452	A	19960307	AU 9528452	A	19950809	B65D-081/26	199617
JP 8058850	A	19960305	JP 95230686	A	19950817	B65D-081/26	199619
BR 9503757	A	19960416	BR 953757	A	19950822	B65D-081/24	199622
CA 2156039	A	19960224	CA 2156039	A	19950814	B65D-081/18	199624
ZA 9506729	A	19960626	ZA 956729	A	19950811	B65D-000/00	199631

ZA 9506729 A 19960626 ZA 956729 A 19950811 B65D-000/00 199631  
NZ 272738 A 19980126 NZ 272738 A 19950808 B65D-077/20 199810  
AU 698070 B 19981022 AU 9528452 A 19950809 B65D-081/26 199903

Priority Applications (No Type Date): US 94295177 A 19940823

Cited Patents: EP 368632; US 4055672; WO 9309946

Patent Details:

Patent Kind Lan Pg Filing Notes Application Patent

EP 698563 A1 E 10

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU NL

PT SE

JP 8058850 A 7

ZA 9506729 A 25

AU 698070 B Previous Publ. AU 9528452

Abstract (Basic): EP 698563 A

A package (10) comprises: (a) a prod. (14); (b) a bottom web (12) supporting the prod. (14); (c) a non-barrier layer (16) sealed to the bottom web enclosing the prod.; (d) a peelable barrier layer (18) on the non-barrier layer (16); and (e) an oxygen scavenger (20) between the non-barrier (16) and barrier (18) layers.

USE - For prods. e.g. fresh red meat prods. and oxygen-sensitive prods..

ADVANTAGE - The oxygen scavenger layer scavenges oxygen trapped in the interior of the package and enhances the effectiveness of the barrier layer, and the package is highly transparent.

Dwg.1/7

Title Terms: PACKAGE; OXYGEN; SENSITIVE; PRODUCT; FRESH; RED; MEAT; HIGH; TRANSPARENT; COMPRISE; PRODUCT; BOTTOM; WEB; NON; BARRIER; PEEL; BARRIER; LAYER; OXYGEN; SCAVENGER; COMPRISE; ETHYLENIC; UNSATURATED; HYDROCARBON; POLYMER

Derwent Class: A18; A92; Q32; Q34

International Patent Class (Main): B65D-000/00; B65D-077/20; B65D-081/18; B65D-081/24; B65D-081/26

International Patent Class (Additional): B65D-075/32; B65D-081/00

File Segment: CPI; EngPI

Manual Codes (CPI/A-N): A04-G01E; A09-A09; A12-P01A

Polymer Indexing (PS):

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\*001\* 018; R00326 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53 D58 D82; P1332 P1694; H0011-R; S9999 S1285-R; P1150

\*002\* 018; R00360 G0555 G0022 D01 D12 D10 D51 D53 D58 D69 D82 C1 7A; H0011-R; S9999 S1285-R

\*003\* 018; R00326 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53 D58 D82; P1332 P1694; H0011-R; S9999 S1285-R; ND01; K9416; K9698 K9676; K9701 K9676; K9574 K9483; Q9999 Q8399-R Q8366; Q9999 Q7589-R; P1150

\*004\* 018; Q9999 Q6780; B9999 B4864 B4853 B4740; K9712 K9676; Q9999 Q7227 Q7114; B9999 B5334 B5298 B5276; K9745-R

<02>

\*001\* 018; P0635-R F70 D01; S9999 S1285-R

\*002\* 018; ND01; K9416; K9698 K9676; K9701 K9676; K9574 K9483; Q9999 Q8399-R Q8366; Q9999 Q7589-R; Q9999 Q6780; B9999 B4864 B4853 B4740; K9712 K9676; Q9999 Q7227 Q7114; B9999 B5334 B5298 B5276; K9745-R

\*003\* 018; B9999 B4784 B4773 B4740

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\*001\* 018; P0000; S9999 S1285-R

\*002\* 018; ND01; K9416; K9698 K9676; K9701 K9676; K9574 K9483; Q9999 Q8399-R Q8366; Q9999 Q7589-R; Q9999 Q6780; B9999 B4864 B4853 B4740; K9712 K9676; Q9999 Q7227 Q7114; B9999 B5334 B5298 B5276; K9745-R

\*003\* 018; B9999 B4331 B4240

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\*002\* 018; ND01; K9416; K9698 K9676; K9701 K9676; K9574 K9483; Q9999 Q8399-R Q8366; Q9999 Q7589-R

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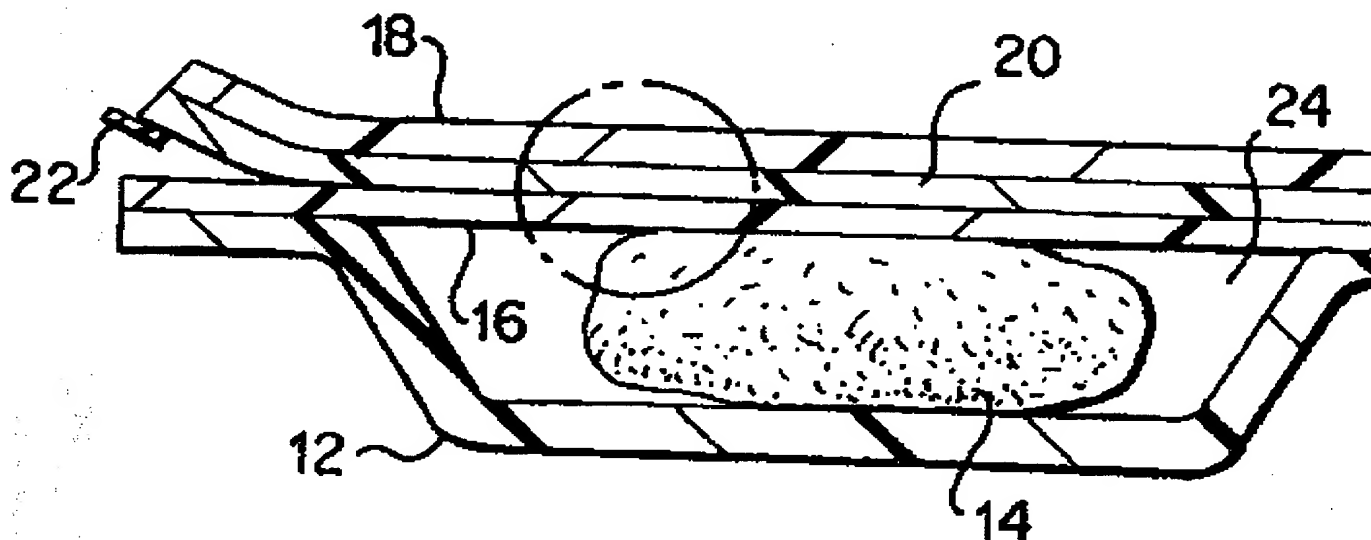
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\*003\* 018; Q9999 Q9370; Q9999 Q8526 Q8366; Q9999 Q7114-R; B9999 B5436 B5414 B5403 B5276; B9999 B5447 B5414 B5403 B5276; K9610 K9483

B5414 B5403 B5276; B9999 B5447 B5414 B5403 B5276; K9610 K9483  
 \*004\* 018; Q9999 Q9370; Q9999 Q8526 Q8366; Q9999 Q7114-R; B9999 B5436  
 B5414 B5403 B5276; B9999 B5447 B5414 B5403 B5276; K9610 K9483



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009654556

WPI Acc No: 93-348107/199344

XRAM Acc No: C93-154269

XRFX Acc No: N93-268730

**Packing material, for foods - comprises outer sheet having gas barrier layer and inner sheet**

Patent Assignee: DAINIPPON PRINTING CO LTD (NIPPO )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 5254568	A	19931005	JP 9251917	A	19920310	B65D-081/20	199344 B

Priority Applications: (No Type Date): JP 9251917 A 19920310

Patent Details:

Patent	Kind	Lan	Pg	Filing Notes	Application	Patent
JP 5254568	A		5			

Abstract (Basic): JP 5254568 A

Packing material consists of an outer sheet having a gas barrier layer and an inner sheet, in which an enclosed space layer is formed between the outer sheet and the inner sheet.

Pref. the outer and inner sheets are made of the film of polypropylene/ethylene-vinyl alcohol copolymer/polypropylene laminate. The enclosed space layer is filled with an inert gas or at least any one of an oxygen absorbent and a moisture absorbent. The oxygen permeability of the gas barrier layer is regulated to be 5cc.25 micron/m2.24 hrs. or less.

USE/ADVANTAGE - The packing material to be used for packing foods or others can effectively and safely store foods by preventing the intrusion of oxygen from the outside of the packing material.

Dwg.0/4

Title Terms: PACK; MATERIAL; FOOD; COMPRISE; OUTER; SHEET; GAS; BARRIER; LAYER; INNER; SHEET

Derwent Class: A17; A92; Q34

Derwent Class: A17; A92; Q34  
 International Patent Class (Main): B65D-081/20  
 International Patent Class (Additional): B65D-081/26  
 File Segment: CPI; EngPI  
 Manual Codes (CPI/A-N): A12-P01  
 Plasdac Codes (KS): 0231 0241 0248 2513 2522 2680 2774 2780 3255  
 Polymer Fragment Codes (PF):  
 \*001\* 017 04- 041 046 050 381 435 502 633 688  
 \*002\* 017 034 04- 041 046 047 27& 381 435 502 540 57& 633  
 Polymer Indexing (PS):  
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 \*001\* 017; R00964 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53 D58 D83;  
 H0000; S9999 S1285-R; S9999 S1581; P1150; P1343  
 \*002\* 017; ND01; K9574 K9483; K9698 K9676; Q9999 Q7589-R; Q9999 Q8366-R  
 \*003\* 017; K9712 K9676  
 <02>  
 \*001\* 017; R00326 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53 D58 D82;  
 H0022 H0011; P1332; S9999 S1285-R; S9999 S1581; P1150  
 \*002\* 017; ND01; K9574 K9483; K9698 K9676; Q9999 Q7589-R; Q9999 Q8366-R  
 \*003\* 017; B9999 B4864 B4853 B4740; Q9999 Q6780

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009056663 \*\*Image available\*\*

WPI Acc No: 92-184044/199223

XRAM Acc No: C92-084315

XRPX Acc No: N92-138931

**Package for oxygen-sensitive heat processed food - has  
 sealed spaced inner and outer racks of oxygen barrier material**

Patent Assignee: AUSTRALIAN FOOD PROCESSING LAB PTY LTD (AUFO-N); SAFCOL  
 HOLDINGS LTD (SAFC-N)

Inventor: LAING R J; WARNE A D

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat	No	Kind	Date	Main IPC	Week
AU 9184759	A	19920402	AU 9184759	A	19910925	A23L-003/10	199223	B

Priority Applications (No Type Date): AU 902463 A 19900925

Patent Details:

Patent	Kind	Lan	Pg	Filing	Notes	Application	Patent
AU 9184759	A		16				

Abstract (Basic): AU 9184759 A

A package comprises a sealed inner pack holding the food and a sealed outer pack of oxygen barrier plastics, spaced around and wholly contg. the inner pack, with the interior of the outer pack filled with inert gas. Both packs are pref. trays made of the barrier material and sealed by a flexible web of barrier material across the top with the webs sepd from each other by a small space.

Both trays pref. have a peripheral flange, the flanges interfitting with each other. The inner pack flange pref. has inner and outer periphery ribs across which the web is sealed. The inner pack may be evacuated and sealed under vacuum. USE/ADVANTAGE - Partic. for packaging abalone, minimises oxygen ingress and resultant deterioration.

Dwg.2/5

Title Terms: PACKAGE; OXYGEN; SENSITIVE; HEAT; PROCESS; FOOD; SEAL; SPACE;  
 INNER; OUTER; RACK; OXYGEN; BARRIER; MATERIAL

Index Terms/Additional Words: ABALONE

Derwent Class: D12; D14; Q31; Q34

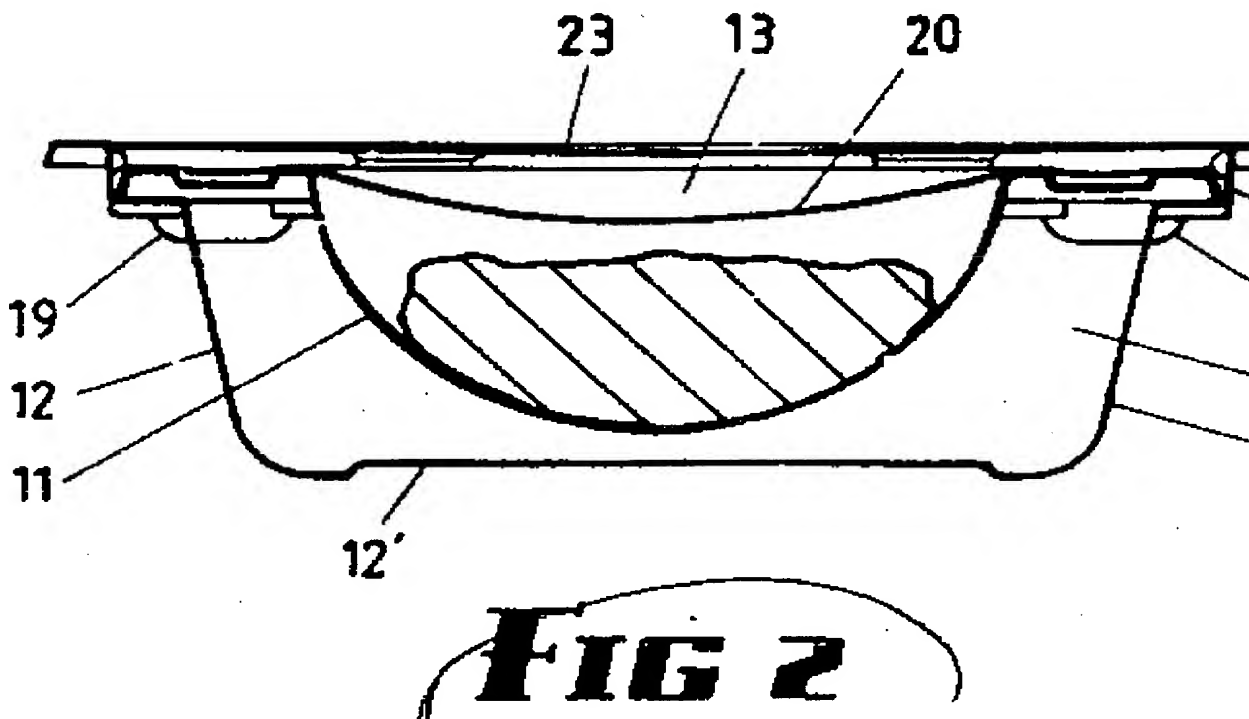
International Patent Class (Main): A23L-003/10

International Patent Class (Additional): B65B-025/22; B65B-029/08;

B65B-031/02; B65B-031/04; B65D-081/20

File Segment: CPI; EngPI

Manual Codes (CPI/A-N): D03-A02; D03-H02F



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008371775      \*\*Image available\*\*

WPI Acc No: 90-258776/199034

XRAM Acc No: C90-112328

XRPX Acc No: N90-200345

**Food package comprising outer foil bag and inner packages -  
each with one or more units of packed product**

Patent Assignee: HELMVEE U (HELM-I)

Inventor: HELMVEE U

Number of Countries: 001    Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
SE 8804186	A	19900519	SE 884186	A	19881118		199034 B

Priority Applications (No Type Date): SE 884186 A 19881118; SE 884186 A 19881118

Abstract (Basic): SE 8804186 A

The outer bag is of foil material, possibly in the form of a hose, form which the package is produced by welding or closure in some other way at its ends. The foil material is barrier-forming, i.e. impermeable to gas. Inside the outer bag are a number of inner packages used to contain fresh food such as meat chops, vegetables, fish, etc., such inner packages being composed of a basic tray of cardboard or aluminium foil, and a cover of fluid-tight, but non-barrier-forming foil material permeable to gas.

The whole packaging arrangement, at the time of formation, is

filled with a protective gas of suitable type e.g. a mixt. comprising approximately 20 per cent by vol. of oxygen, and 80 per cent by vol. of carbon dioxide or nitrogen.

USE/ADVANTAGE - To present and protect fresh, packaged food for immediate consumption or preservation in deep freeze. (Provisional Basic previously advised in week 9028) (7pp Dwg.No.1/1)

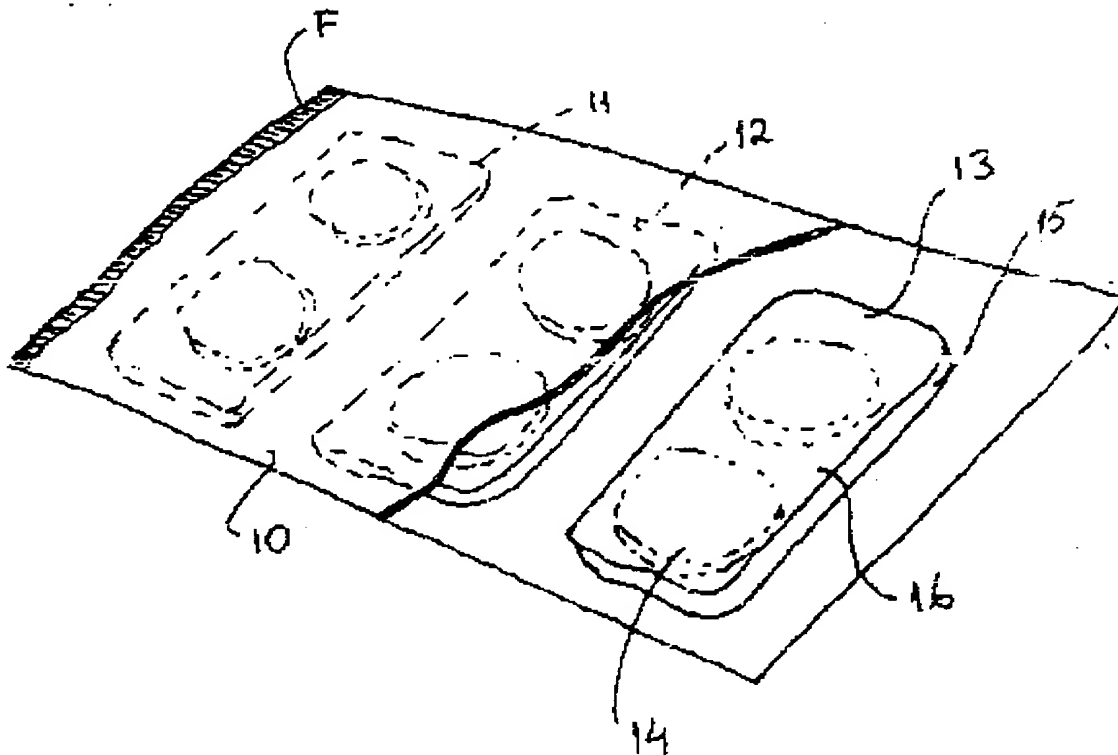
Title Terms: FOOD; PACKAGE; COMPRISE; OUTER; FOIL; BAG; INNER; PACKAGE; ONE ; MORE; UNIT; PACK; PRODUCT

Derwent Class: D13; Q34

International Patent Class (Additional): B65D-081/20

File Segment: CPI; EngPI

Manual Codes (CPI/A-N): D03-H02F



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007847259

WPI Acc No: 89-112371/198915

XRAM Acc No: C89-049954

XRPX Acc No: N89-085695

**Outer packaging of easy-to-oxidise article - has oxygen removed from outer packaging container**

Patent Assignee: DAINIPPON PRINTING CO LTD (NIPQ )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC
JP 63248678	A	19881014	JP 8772992	A	19870328	

Week  
198915 B

Priority Applications (No Type Date): JP 8772992 A 19870328

Patent Details:

Patent	Kind	Lan	Pg	Filing Notes	Application	Patent

Patent Kind Lan Pg Filing Notes Application Patent

JP 63248678 A 5

Abstract (Basic): JP 63248678 A

Easy to oxidise article is filled in a container. The article is contained in an outer packaging container. Oxygen is removed from the outer packaging container.

USE - The method applies to foods, toilet articles, medicines. The method provides the article with quality retention and long-term preservation.

0/0

Title Terms: OUTER; PACKAGE; EASY; OXIDATION; ARTICLE; OXYGEN; REMOVE; OUTER; PACKAGE; CONTAINER

Derwent Class: B07; Q34

International Patent Class (Additional): B65D-081/20

File Segment: CPI; EngPI

Manual Codes (CPI/A-N): B11-C06

Chemical Fragment Codes (M6):

\*01\* M903 Q224 Q254 Q624 R740

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003542444

WPI Acc No: 82-90436E/198243 -

Plastics bag contg. perfusion soln. which avoids contact with oxygen - is steam sterilised under inert gas, nitrogen, pressure, cooled under inert gas and packed in oxygen-impermeable container

Patent Assignee: TERUMO CORP (TERU )

Inventor: HAYAKAWA N; IWAMOTO T; MATSUBARA B

Number of Countries: 006 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
BE 893480	A	19821001					198243 B
EP 67420	A	19821222	EP 82105080	A	19820609		198301
JP 57206447	A	19821217	JP 8190392	A	19810612		198305
US 4657540	A	19870414	US 85757770	A	19850723		198717
EP 67420	B	19871104					198744
DE 3277580	G	19871210					198750
JP 89016502	B	19890324					198916

Priority Applications (No Type Date): JP 8190392 A 19810612

Cited Patents: DE 1933542; DE 2363468; DE 2800484; DE 2933071; DE 2362468

Patent Details:

Patent Kind Lan Pg Filing Notes Application Patent

BE 893480 A 19

EP 67420 A E

Designated States (Regional): DE FR SE

EP 67420 B E

Designated States (Regional): DE FR SE

Abstract (Basic): BE 893480 A

Flexible container made of plastics material, and contg. a perfusion soln., is sterilised in a satd. steam atmos. which is put under pressure with a gas, which is inert w.r.t. the perfusion solution and which effectively contains no O<sub>2</sub>, so that the perfusion soln. does not deteriorate during sterilisation.

The walls of the perfusion bag are pref. made of PVC or EVA copolymer. The perfusion solns. contain constituents which readily deteriorate in contact with oxygen. They are used for parenteral admin. of complete feeds, such as solns. contg. aminoacid concentrates, which contain tryptophane, and solns. contg. fat emulsions.

The sterilisation is usually effected at 100-130 deg. C, pref. 115-125 deg. C. The saturated steam pressure at the sterilisation temp. is increased by 10-200% using the inert gas (pref. nitrogen). The preferred sterilisation pressure is 1.2-2.0 kg/sq cm (1.2-2.0 bars).



The autoclave is cooled under an atmos. of the inert gas and the sterilised perfusion soln. in its plastic container is pref. packed in a packaging material which is impermeable to gas. This packaging material is pref. a laminate having an outer layer of biaxially orientated polypropylene, a middle layer of ethylene-vinyl alcohol copolymer and an inner layer of monoaxially orientated polypropylene. The package may also contain an oxygen absorbing substance, so that the sterilised container is not contacted with oxygen, the storage life of the perfusion solution is extended.

Title Terms: PLASTICS; BAG; CONTAIN; PERFUSION; SOLUTION; AVOID; CONTACT; OXYGEN; STEAM; STERILE; INERT; GAS; NITROGEN; PRESSURE; COOLING; INERT; GAS; PACK; OXYGEN; IMPERMEABLE; CONTAINER

Index Terms/Additional Words: PVC; EVA; POLYVINYL; ACETATE; POLYETHYLENE

Derwent Class: A96; P31; P33; P34; Q31; Q32; Q34

International Patent Class (Additional): A61B-019/00; A61J-001/00;

A61L-002/06; A61M-005/00; B65B-055/02; B65D-081/20; B65D-085/50

File Segment: CPI; EngPI

Manual Codes (CPI/A-N): A11-C; A12-V03

Plasdoc Codes (KS): 0209 0231 0241 3155 0248 0759 0789 2007 2399 2454 3228

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Polymer Fragment Codes (PF):

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